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SYSTEM AND METHOD FOR ELECTROSURGICAL CUTTING AND ABLATION

ABSTRACT OF THE DISCLOSURE

5 An electrosurgical probe (10) comprises a shaft (13)
having an electrode array (58) at its distal end and a
connector (19) at its proximal end for coupling the electrode
array to a high frequency power supply (28). The shaft
includes a return electrode (56) recessed from its distal end
10 and enclosed within an insulating jacket (18). The return
electrode defines an inner passage (83) electrically connected
to both the return electrode and the electrode array for
passage of an electrically conducting liquid (50). By
applying high frequency voltage to the electrode array and the
15 return electrode, the electrically conducting liquid generates
a current flow path between the return electrode and the
electrode array so that target tissue may be cut or ablated.
The probe is particularly useful in dry environments, such as
the mouth or abdominal cavity, because the electrically
20 conducting liquid provides the necessary return current path
between the active and return electrodes.

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